

Title:	13 amp 240 volt plug inspection		
Priority		Red – Audit Rating: Non-Conformance-Major	
Legislation:	PUWER, HASWA S.6, EaWR		
Brief Description:	During SafeHire audits a range of issues have been identified regarding inspection of 13 amp plugs used on 240v equipment.		
Kit Affected:	All 240 volt equipment with 13 amp plugs fitted		
Images:			
Neutral wire insulation degradation / thermal damage – high continuous load items e.g. transformers – damage may result from poor contact / connection in screw terminal.			
Fuse retention clips, poor contact / damage causing thermal damage / failure and basic issues regarding terminal screws / earth wire too short in images 3 and 4 below, if cable is pulled, the earth should disconnect last. All highlight a lack of inspection as part of combined inspection and test (PAT)			
Recommended Actions:	As part of a combined inspection and test, plugs must be BS1363A, be of a durable construction and ALL plugs must be opened to check condition of wires, terminal screws, fuse, holder and clamp.		
Notes:	<p>For high current items, where screw terminals are used e.g. plugs, splitter boxes, transformers etc. it is worth reviewing use of soldered ends or ferrules (bootlace shown) for cable ends in conjunction with an appropriate crimping tool e.g.</p> <p>The ferrule ensures multi-strand cables are not damaged and maximises contact in the terminal. Damage may occur where certain types of screw terminals allow the screw head to contact the strands of the conductor, strands may break and compression of strands is not consistent. This reduces the effective diameter of the conductor therefore increasing the loading on the remainder.</p>		
Circulation:	workshops, mobile service and management team		